

resolution

QUALITY & INNOVATION resolution AWARDS 2011

The values of Quality and Innovation underpin our industry and differentiate us from others. The quality aspect must be a given in a product intended for professional applications not just for longevity and resale value but also for its degree of optimisation for a given function or application. Quality is as palpable in a plug-in or piece of software as it is in a hardware unit — it's a matter of feel and response. The cost so often associated with real quality is inherently connected with the second of our values — innovation.

The research and development invested by a manufacturer in a product is reflected in its price and it is through innovation that our industry moves forward and we are presented with solutions to problems or different ways of looking at and challenging established workflows. There is a massive difference between products that feed a need at a price point to those that attempt to change appetites and expectations. There are times when we have to remind users that it is their workload, efficiency, creativity and economic return that governs their success rather than their accumulation of surprisingly affordable gear.

Perhaps innovation doesn't speak to everyone as loudly and obviously as quality does, yet when the two combine in a product the result can be magnificent and game-changing. The Resolution Awards recognise quality and innovation in professional audio and the products highlighted here have been judged to be outstanding in these respects by the best informed readership in the industry.

Zenon Schoepe, Editorial Director

2011 Resolution Awards Winners

Dangerous Music BAX EQ
Avid Pro Tools 9
Solid State Logic Nucleus
API The Channel Strip
Solid State Logic MADI-X8
Schoeps SuperCMIT

Neumann KH 120
Flux IRCAM SPAT
Grace Design M103
Endless Analog CLASP
Universal Audio
UAD-2 Satellite



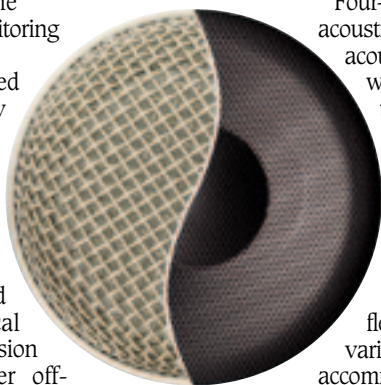
Neumann KH 120

The KH 120 is the first product in the new line of Neumann studio monitors since its assimilation of Klein + Hummel. Designed as a nearfield or as a rear loudspeaker in multichannel systems, it has a Mathematically Modelled Dispersion waveguide, acoustic controls, analogue Class AB amplifiers, various input formats and a range of mounting hardware.

Neumann and Klein + Hummel have been part of the Sennheiser Group for 20 and 5 years respectively and towards the end of 2009 it was announced that Klein + Hummel would close and the product lines were split with Installed Sound products moved to the Sennheiser brand and Studio Monitoring products moved to Neumann.

The first Neumann branded studio monitor is a two-way active that the company says represents the latest in acoustic and electronic simulation and measurement technologies. A titanium fabric dome brings high-frequency reproduction with very low-distortion and combined with the elliptical Mathematically Modelled Dispersion (MMD) waveguide, a smoother off-axis response is seen which is then more forgiving of diverse acoustical environments. The wide horizontal dispersion of the waveguide brings freedom of movement within the large listening area and the narrow vertical dispersion reduces reflections off the mixing console. The long-throw bass driver with its composite sandwich cone has well-damped break-up modes and low distortion at high output levels. The large front panel ports minimise bass compression and allow easier mounting in tight spaces, such as OB vans.

The compact aluminium cabinet, which is



magnetically shielded, minimises resonances, offers better heat dissipation, and will have a longer life than a wooden or plastic cabinet. The one-piece front panel has no unnecessary discontinuities and minimises diffraction and aids a smooth frequency response. It employs 80W analogue Class AB amplifiers that achieve a claimed response down to 52Hz at -3dB with an SPL of 111.1dB at 1m. Self-generated noise is 0dB(A) at 1m, i.e. inaudible at the listening position, even in a quiet room at a close listening distance.

Separate woofer and tweeter electronic limiters, an excursion limiter, an infrasonic filter, and thermal-protection circuitry aid reliability even under punishing conditions.

Four-position bass, low-mid and treble acoustical controls give more control in acoustical environments. Easy interfacing with signal sources is possible with the electronically-balanced XLR input combined with wide range input gain and output level controls. The ground lift control reduces noise in electrically noisy environments and overcomes ground loops in temporary set ups.

Hardware options bring more flexibility when mounting cabinets in varied locations and the display dimmer accommodates low-level lighting conditions or behind-the-screen use. The universal switched-mode power supply (100-240V AC) means that one version of the product works in any country, and the circuitry is also tolerant of poor quality mains supplies. The KH 120 A has an analogue input while the KH 120 D will have an additional digital input. Any KH 120 is 'pair-matched' to any other KH 120 as production consistency is said to be so high.

The rest of the Klein + Hummel range will eventually be replaced by similarly-sized Neumann products but the KH 120 represents a very promising start in studio monitoring. ■

Contact

NEUMANN, GERMANY

Website: www.neumann.com

ALSO NOMINATED: ATC SCM 25; Focal CMS 40; Genelec 1238CF; PMC AML2.

QUALITY & INNOVATION
resolution
AWARDS 2011
 Winner
 Dynamic

API The Channel Strip



With a name rather than the more usual number, API's The Channel Strip is nevertheless subtitled with four model numbers: 512C – 527 – 550A – 325. This unit is an interesting alternative to the 7600 and seems more intended for standalone recording and processing; it has 12 audio (and sidechain/control) connection sockets.

The four distinct sections are the 512C preamp, followed by the 527 Compressor, a 550A EQ and then the output section, the 325 model number referring to the Line Driver circuitry. The Output section has a Cut button.

The Compressor has plenty of flexibility. There are Feed-Forwards (New) and Feedback (Old) modes for different characters, as per the 527 and earlier 2500 models. New is more akin to a dbx 160 while Old leans more towards the 1176 style. There is also the patented Thrust button that applies a high pass filter to the sidechain for that great punchy bottom end effect on programme. Soft or Hard Knee modes are switchable. Knobs are provided for Threshold, Ratio, and a dual-concentric Attack and Release. The compressor's meter is unusually reversed in that all LEDs lit represents no gain reduction, with the lights going out to represent compression.

With all the different possibilities here, the compressor can satisfy most tastes and styles. The Attack and Release are wide-ranging, and the Ratio goes continuously from 1:1 through 3:1 at half-way round, to infinity:1. With the different modes, these ranges effortlessly cover all eventualities from punchy attacking drum hits and squashy, grainy drum ambience limiting to punchy bass guitar, smooth and luscious vocals and everything in-between.

'This is a beautifully designed and constructed device. The mic preamp is surely one of the best there is, the compressor covers a lot of possibilities and sounds great, and the EQ is as sweet as a tin of Golden Syrup (but without the side effects.)' *Resolution* V10.6. ■

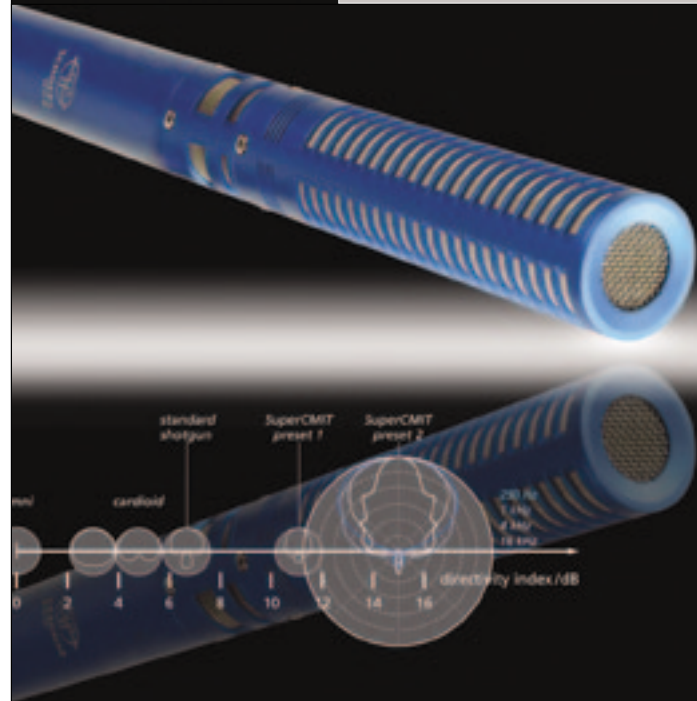
Contact

API, USA
Website: www.apiaudio.com

ALSO NOMINATED: Al.So Hellax; Generic Preceptor;
 Retro Instruments Powerstrip.

SCHOEPS 
 Digital

QUALITY & INNOVATION
resolution
AWARDS 2011
 Winner
 Microphone



Thanks for voting for the SuperCMIT

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Solid State Logic Nucleus



The Nucleus combines a 16-channel fader controller, arranged with eight channels on each side of a centre section, with two mic preamps feeding an onboard USB soundcard, SPDIF outputs, or analogue outputs, along with basic monitoring facilities and customisable DAW function control. The smart looking desk is wide and shallow in depth; it has a gentle rake, and everything is within easy reach.

All connections are on the rear panel, and there are many. Setting up the Nucleus with your DAW requires connection of both Ethernet and USB to the host computer. There are four software packages to install. Nucleus Remote is the application used for DAW control configuration, the ipMIDI driver enables communication with the DAW, and the optional Nucleus USB Soundcard driver and Control Panel packages are used for the 4-channel soundcard.

It is possible to toggle Nucleus control of up to three different DAWs on up to three different computers, with simultaneous transport control if required, using a Network Router and USB Switcher. Dedicated buttons on the console enable this.

The 16 faders are smooth yet swift-acting and are topped off with shiny caps. The Nucleus boasts a large, clear two-row, six-character scribble strip and above are Select, Solo and Cut buttons. The 'V-Pots' are rotary encoders with a smooth, lightly damped analogue feel. They are surrounded by 11 yellow LEDs to show roughly the setting (depending on their assigned function) plus a red one at the bottom that indicates status, for example, an exactly centred pan pot. These knobs also include a push switch ('V-Sel') for various functions.

Basic DAW operation is fairly self-explanatory. At the bottom of the centre section are enormous transport controls that light up appropriately. There are dedicated Bank and Channel nudge buttons for scrolling through the channels of

the DAW. Using the Flip button, Sends can be adjusted using the main faders, and the V-Pots become the Send's associated Pan controls. It is possible to use V-Pots to adjust plug-in parameters via HUI.

The fun starts when you launch Nucleus Remote software and start assigning functions to Soft Keys. There are some excellent things to play with here, such as the Jog/Shuttle function. There are options to scroll by timeline format (in seconds if Min:Sec is selected in Pro Tools, bars if that is the main counter, or even Frames if Timecode is selected), scroll by Nudge value, or there is Tracks mode, which uses the wheel to bank faders on the Nucleus one-by-one.

The small section at the top centre of the console provides basic monitoring and mic preamp operation. Monitoring comprises a volume knob to control stereo DAW level as it passes through to the monitor outputs. The mic preamps' signals can be blended with the mix for zero-latency monitoring while their direct outputs are recorded. A Blend knob balances the preamps with the mix. Using the Mono-L and Mono-R buttons you can treat them as a hard-panned stereo pair, or either-or-both centred in mono. Mic preamps are SuperAnalogue with plenty of gain and 48V, polarity, Hi-Z and 80Hz filter, and the insert is switchable. Pressing the Mixdown button cleverly reassigns the inserts to source the monitor inputs as the send (instead of the preamps), sending the insert output to the monitors and to the preamp direct outputs, so you can record the mix back to the DAW post-insert.

'The Nucleus is a very smart-looking, capable, and surprisingly complex beast. The more you get your head around the concepts and functions, the more the Nucleus makes sense. I eventually fell absolutely in love with the Nucleus, and it will undoubtedly become the nucleus of many working setups.' *Resolution* V10.3. ■

Contact

SOLID STATE LOGIC, UK

Website: www.solidstatelogic.com

ALSO NOMINATED: Avid MC Control V2; Digico SD9; Focusrite Control 2802; Studer Vista 9.

QUALITY & INNOVATION
resolution
AWARDS 2011
Winner
Interface

Solid State Logic MADI-X8

The MADI-X8 is a versatile and cost-effective 8-port MADI audio router/splitter/aggregator system that was a direct response to requests for an audio asset sharing system that is affordable for small and mid scale installations.

Delivering a low-cost, 512 crosspoint router with eight MADI I-O and clock distribution that can be controlled from cross-platform browser software from anywhere on a network is a significant achievement. In addition to offering simple point-to-point bulk routing, MADI-X8 offers Source Distribution (one source to several destinations), Device Splitting (any combination of individual channels to any destination) and Source Aggregation (a single 64-channel output consisting of any combination of channels from various inputs). It has applications in broadcast production studios and OB vehicles, large scale film/game scoring, multiroom studio complexes requiring real time asset sharing, and live sound.

MADI-X8 is a 1U with six MADI fibre and two coax I-Os. It provides a



512 x 512 point routing matrix controlled by SSL Logictivity Browser software. The browser interface makes creation of complex routing configurations very straightforward. The MADI-X8 hardware can store 128 presets and continues to function when the Logictivity Browser is disconnected.

MADI-X8 can act as a Master Clock source or as a clock distribution system via its MADI and/or Word clock connections. It has Intelligent Clock Sensing with Auto Failover, which can monitor a Primary Master Clock and a Secondary Clock source, and can switch automatically should the Master Clock source fail. Up to four MADI-X8 units can be controlled by a single browser and multiple browsers can control a single MADI-X8 over a wired or wireless network.

This kind of technology has not been available at this price before so it lowers the barrier to what can be achieved with an intelligent audio network in small- to mid-scale systems. ■

Contact

SSL, UK
Website: www.solidstatellogic.com

ALSO NOMINATED: Apogee Symphony I/O; Avid HD I/O; DAD AX24 192 PHD; RME Fireface UFX.

QUALITY & INNOVATION
resolution
AWARDS 2011
Winner
EQ

THE DANGEROUS BAX EQ

Mastering and Mix Buss Shelving EQ



Inspired by the Classic P. J. Baxandall Shelving Curves

PAUL STAGEY
Black Crowes, Oasis



"I have found the EQ that never leaves my mix buss. The gentle, musical lows and highs add presence to every mix and make a perfect companion to my TRIDENT A console. The Bax always makes a noticeable improvement to my work."

MICHAEL ILBERT
The Mires, Supergrass, Beatseaks, Roxette



"Since I heard this unit for the first time it has not left my mix buss! The BAX takes away the need to push each channel and enhances the mix without changing it's essential sonic character."

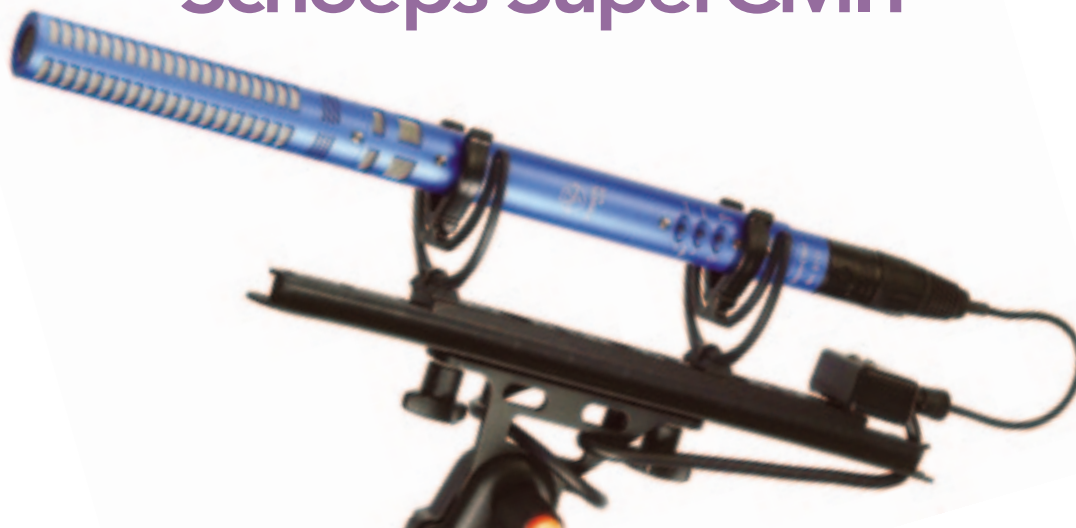
M A S T E R I N G C R E A T I V I T Y
www.dangerousmusic.com

TRY AT YOU LOCAL DEALER - WWW.MASTERINGWORKS.COM





Schoeps SuperCMIT



The SuperCMIT digital shotgun mic offers increased directivity and is based on Schoeps' analogue CMIT 5. Features include 'extraordinary' diffuse sound suppression, a new operating principle with two transducers, digital signal processing algorithms, and a two-channel output with the SuperCMIT signal on channel 1 and a (direct, single-transducer) CMIT signal in channel 2. The SuperCMIT is a digital microphone and outputs in AES42, Mode 1 but with an optional PSD 2U powering adapter, it can also be used with a conventional AES3 input.

In the barrel of the SuperCMIT, just behind the interference tube, is the second (cardioid) capsule, which faces backwards. This picks up the ambient sound while largely ignoring the forward, wanted audio. The output of both capsules is digitised and the ambient signal can then be subtracted from the forward one — it is cancellation but in the digital domain where the relationship between phase, wavelength and frequency is much more elastic. The actual algorithms are provided by a Swiss company, Illusonic, and the processing is done by a DSP housed in the microphone body.

Unwanted noise is claimed to be greatly reduced in level even at low frequencies without altering the tone colour of front-arriving direct sound. DSP in the SuperCMIT recognises sound energy arriving from various directions and determines whether that sound has a discrete, persistent direction of arrival or not. It uses this information to suppress diffuse sound and to focus on discrete sound allowing the 'reach' of the shotgun to be increased significantly without causing the usual sound-colouring artefacts.

It has two filters identical to those on the CMIT 5. The mic has three recessed buttons with six discreet LEDs to show the settings. The HF lift counteracts the effects of a furry windscreen and the steep cut 18dB/octave 80Hz filter is for removing handling and wind noise but the third button operates a choice of directionality. Preset 1 gives a Directivity Index of 11dB while Preset 2 gives 15dB, with the caveat that a few processing artefacts might be heard. By comparison a conventional rifle microphone only manages a Directivity Index of about 7dB (a cardioid is 5dB).

The second output channel always carries the signal of the regular shotgun while the Preset button controls the directivity of the signal on the first output channel (SuperCMIT).

'Off-axis sounds just disappear and do so at all frequencies, not simply the mids and highs. At 250Hz the rear sensitivity is -14dB, or -25dB depending upon the preset, which is far beyond what even the longest rifle microphone (with all its self-evident colouration) can manage.

'The other noticeable effect is that the space around you tends to disappear — not dissimilar to the effect of noise-cancelling headphones — and this may feel a little strange though it is an inevitable by-product of the directivity that you would want this microphone for.

'The primary impression, visually and sonically, is simply one of great cleanliness. A direct comparison of the raw and processed channels reveals a change in the background noise — partly the 3dB drop in the processed signal noise floor and partly the difference in ambience — and a marked focussing of the "wanted" audio.' *Resolution V9.4.* ■

Contact

SCHOEPS, GERMANY
Website: www.schoeps.de

ALSO NOMINATED: Microtech-Gefell M1030; Milab DC-96C; SE Gemini 5.

QUALITY & INNOVATION
resolution
AWARDS 2011
Winner
Processor

Universal Audio UAD-2 Satellite

Universal Audio's UAD-2 Satellite DUO and QUAD FireWire DSP Accelerator

Packages put the entire UAD Powered Plug-Ins library within reach of FireWire 800 and 400-equipped computers; no PCIe card installation is required.

Available in DUO or QUAD processor format (with two or four Analog Devices SHARC processors respectively), UAD-2 Satellite packages provide a processing boost for DAWs and include a selection of classic analogue emulation plug-ins.

Bundled with the LA-2A and 1176LN Compressor/Limiters, and the Pultec EQP-1A EQ plug-ins, the UAD-2 Satellite QUAD provides



rich, vintage sound quality right out of the box. Satellite also provides easy FireWire access to the complete UAD Powered Plug-Ins

library, including titles from Studer, SSL, Manley, Empirical Labs, Neve, Roland, BOSS, EMT, Fairchild, Harrison, Helios, Little Labs, Lexicon, Pultec, SPL and more. You can also combine UAD-2 Satellite devices with UAD-1 and UAD-2 PCI/PCIx/PCIe cards in a single system.

Compatible with select iMac and MacBook Pros, with support for VST, Audio Units and RTAS, the UAD-2 Satellite QUAD features wide compatibility whether you use Pro Tools, Cubase, Nuendo, Logic Pro, or Digital Performer. Install the software, connect the unit to an available FireWire 800 or 400 port, power up and start mixing. ■

Contact

UNIVERSAL AUDIO, US
Website: www.uaudio.com

ALSO NOMINATED: Nugen Audio VISLM;
 SPL Transpressor; Trinnov ST-2 PRO.



▶▶ NEUMANN.BERLIN

Studio Monitor KH 120

The first member of the Neumann KH Line

KH 120



Studio Monitor Systems ▶▶ WWW.NEUMANN.COM



Dangerous Music BAX EQ



The Dangerous BAX EQ is a deep 1U comprising stereo high and low EQ shelving bands along with high and low filters. As we have come to expect from designer Chris Muth, there is no skimping here and only the finest components are used, including hand-wired Mogami cable, and there are no transformers in the audio path. The front panel features controls that are stepped for repeatability and for matched stereo setup.

There are high and low frequency shelving sections where left and right channels share the frequency selection, but have useful separate boost/cut knobs. Each of these has a range of +/-5dB with half dB steps. The high shelf has eight switchable frequencies at 1.6, 1.8, 2.1, 2.5, 3.4, 4.8, 7.1 and 18kHz. These frequency labels are at about an octave below the true shoulder frequency; with such broad curves Muth seems to have decided that these are better described at the middle of their effective curve, so at 5dB boost there is exactly that amount of boost at the indicated frequency, with the shelf flattening out at about a 6dB boost somewhere above that. The low shelf also has eight positions at 74, 84, 98, 116, 131, 166, 230 and 361Hz, and these are indeed their true shoulder frequencies. Flanking these are the High- and Low-Pass 2-pole filters (12dB/octave) with the low filter settings at 12, 18, 24, 30, 36, 43 and 54Hz, while the high filter settings are at 7.5, 9, 11.1, 12.6, 18, 28 and 70kHz. The filter selection knobs switch individual filters with a relay, so only the chosen filter is selected. While 5dB may not seem like much to play with the Baxandall curves have a very wide Q.

'The BAX has already had the thumbs-up from a number of mastering engineers and that arena is probably where it will prove most popular. If you want power and grunt, or mid-range juicing, then the BAX might not do it, although the high shelf set to lower frequencies certainly brings out some poke. But if you want smooth treble and bass sweetening, then this is a must-try box.' *Resolution* V10.6. ■

Contact

DANGEROUS MUSIC, USA

Website: www.dangerousmusic.com

ALSO NOMINATED: A-Design EM-EQ2; CharterOak PEQ-1; Thermionic Culture Freebird.



Avid Pro Tools 9



Pro Tools 9 incorporates 'next-generation architecture' allowing users the choice to work with Avid audio interfaces, third-party audio interfaces, or no hardware at all when using the built-in audio capabilities of a Mac or PC. This software-only option for Pro Tools delivers 'the most open, flexible and feature rich version in history' according to the company. Also new is support for Eucon to expand control surface options to include Artist Series and Pro Series audio consoles and controllers (formerly known as Euphonix consoles and controllers).

Many features previously available as add-ons are now available as standard. Automatic Delay Compensation — users can mix and record with increased alignment and phase accuracy without the need to manually compensate for latencies from hardware I-Os, internal and external routing, and plug-in algorithm processing. More audio tracks and buses — allows users to create more elaborate productions with support for 96 mono or stereo voices in the new software-only version of Pro Tools (192 voices with Pro Tools HD systems), 256 internal buses, and 160 aux tracks.

Advanced production toolset — Users can analyse and adjust timing across multiple tracks for tighter rhythm with the built-in multitrack Beat Detective module, improve organisation and asset sharing with the DigiBase Pro file management tool, and save time with full Import Session Data dialog.

A series of audio for picture enhancements permits collaboration with other audio and video software users, including: OMF/AAF/MXF interchange and MP3 export; built-in timecode ruler (software only configuration of Pro Tools); updated 7.1 surround panner; and new variable stereo pan depths.

'Pro Tools 9 represents a seismic shift from the Digidesign era into a new strategy for Avid. For years, Pro Tools was (uniquely) DAW software that you couldn't buy; it was merely made available and authorised by virtue of an attached Digidesign audio interface. But now, everything has changed. There is now Pro Tools 9, the optional Complete Production Toolkit 2, and 9HD. Most excitingly, all now come with Core Audio and ASIO support.' *Resolution* V10.1. ■

Contact

AVID, US

Website: www.avid.com

ALSO NOMINATED: Magix Sequoia 11; Merging Technologies Pyramix 7; SADiE 6.

QUALITY & INNOVATION
resolution
AWARDS 2011
 Winner
 Preamp

Grace Design M103



Michael Grace has a well-deserved reputation as a designer of some quite exquisite microphone preamplifiers, and since 1994 the company he established with his brother Eben has been developing and expanding its product line. The M103 is the company's first foray into other areas of signal processing with a single channel of mic preamplification coupled with a three-band equaliser and an optical compressor.

The M103 is a tidy looking box finished with polished chrome knobs and a smattering of stubby toggle switches. The rear panel gives mic level and line level inputs on XLR, together with a line level preamp only output on XLR, and a main (post the EQ and compressor) balanced output on XLR and TRS jack. Unbalanced outputs for the main and preamp only out are also available on 1/4-inch jacks. A TRS jack on the rear is accompanied by a small switch and allows access to the compressor's sidechain or for two M103s to be stereo linked.

The mic preamp is the same signature transimpedance affair used in other Grace Design products. The gain control is a 12-position stepped switch, which gives a gain range of +10dB to +65dB in 5dB steps. A front panel high-impedance instrument input is also available for DI purposes with a gain range of -10dB to +45dB. There's a phantom power switch, HPF (75Hz, 12dB/octave) and a 'ribbon mode' switch that disables phantom power and raises the input impedance of the preamplifier from 8.1kohms to 20kohms.

In use, the preamp stage is extremely quiet even at the extremes of its gain range, and delivers an open, fuss-free sound that delivers tremendous levels of detail without ever sounding overly clinical.

The EQ is three-band with high and low shelving

filters that can be switched to peaking if required, and a fully parametric mid band. It's one of those EQs that is really hard to misuse — keep the cut or boost below 6dB or so and its hard to get results that don't sound musical and polished — at times it can be almost too flattering.

The compressor section uses an optical gain element and, like the EQ, falls firmly into the 'nice' category in terms of its sound. With a maximum compression ratio of 12:1, even at this ratio it remains gentle in its approach. In general the sound is transparent rather than aggressive or overtly 'shaping'. Gain make-up is available courtesy of a +/-10dB master output trim control.

Signal metering can be seen easily at all stages in the signal path, with a three-colour LED showing coarse signal level at the mic pre stage, another LED that shows when signals in the EQ stage are within 6dB of clipping, and a 10-segment LED meter showing final output level post the final output trim control. The EQ and compression stages can be independently switched in and out of circuit and a further switch allows the process order of EQ and Compression to be swapped around. An external sidechain signal can be selected for the compressor, and when selected this looks to the TRS jack on the rear for its source.

The sum of all these parts and little touches is a unit that feels reassuring, safe and hard to go wrong with. It's not a unit that is going to add a distinctive sonic signature to your recordings, but that's not to say that it has no character.

'Polished, solid and hifi-like are all adjectives that spring to mind. But more importantly, it has everything you need, nothing that you don't and is executed to near perfection.' *Resolution* V9.7. ■

Contact

GRACE DESIGN, US

Website: www.gracedesign.com

ALSO NOMINATED: Focusrite ISA 428 MkII; Inward Connections Magnum; RND Portico II Channel.



Flux IRCAM SPAT



IRCAM represents one of the best known and most respected stores of research and knowledge in music and audio related technology. The research department was created for composers needing assistance in realising ideas or concepts that could not be expressed with the technology available on the market. Three years ago IRCAM decided to bring its research to market with a partnership with Flux, which resulted in a series of creative plug-ins.

SPAT, 'The complete Room Acoustics Simulation and Localisation Solution', combines different technologies in the same workflow and processor. A spatialisation engine deals with, among other things, panning laws and HRTF (Head-Related Transfer Functions) and then the reverberation engine integrates into the source localisation in the simulated space.

As the sources are part of the reverb with their own dedicated early reflections and clusters this means that the source localisation and the room acoustic simulation feel and sound very realistic when moving sources around in the space. Actually it's one of the three spaces as each source can be assigned to one of three reverberation engines that interact with each other. This makes mixing acoustics for a movie or a theatre setup very easy when more than one room is a part of the scene at the same time.

As SPAT was designed for surround and multichannel use from the beginning, it offers the option to setup output arrangements in a variety of stereo and surround configurations (including subwoofer mix). You can input in different formats, perform the processing and automation for the localisation and reverberation, and then send it to the outputs in another format. For surround mixing, the eight inputs and outputs make configurations up to 7.1 possible using an input/output format setup panel.

'SPAT is a quantum leap forward in algorithmic localisation/room simulation plug-ins. Despite the interface and user manual shortcomings it is still on the must-have list of any serious postproduction or games sound designer prepared to invest time in learning and tweaking.' *Resolution V10.4.* ■

Contact

FLUX, FRANCE
Website: www.fluxhome.com

ALSO NOMINATED: Izotope RX 2; PSP OldTimer ME; Universal Audio Studer A800; Waves Aphex Vintage Aural Exciter; Waves Vocal Rider.



Endless Analog CLASP



CLASP is designed to enable you to track and overdub in the DAW with all the sonic benefits of tape using a relatively invisible process. Designer Chris Estes came up with the concept six years ago and the heart of the system is a 2U that includes two microprocessors and runs an audio switching system. This is partnered with software in the shape of plug-ins offering bi-directional control and the means of time-aligning the audio.

CLASP supports Pro Tools, Nuendo and Cubase and the list of supported multitrack tape machines is extensive and stereo and mono models also work. To process the signal via the tape you must have the multitrack in Record with the machine monitoring from the Repro head. Due to the head gap, this will be a delayed signal relative to real-time. For monitoring during recording CLASP switches its monitoring outputs to pick up the input signal with audio passing straight through while it sends the delayed tape-processed signal to the DAW. The problem of the audio being late into the DAW is solved with software and CLASP interacts with Pro Tools so the recorded audio files are time-stamped with a value in the future that compensates for the head gap. When playing back and overdubbing everything lines up with Pro Tools playback behaving as the traditional sync head. CLASP sets up a buffer inside Pro Tools using the Delay Compensation engine and the buffer slides depending on the tape machine, tape speed and sample rate.

'With Pro Tools in Quick Punch mode, arming tracks and setting the transport running in Play or Record causes CLASP to plunge the multitrack machine into Record, enabling seamless punch-in in Pro Tools. On punch-in, CLASP switches monitoring from Pro Tools playback to input signal, while all the time feeding tape output to the Pro Tools track input, for subsequent edit peeling. It all works smoothly, with the tape-processed signal lining up in Pro Tools beautifully.' *Resolution V10.4.* ■

Contact

ENDLESS ANALOG, US
Website: www.endlessanalog.com

ALSO NOMINATED: Tascam HS-P82